

SPECIFICATION AMENDMENTS

Please replace the paragraph beginning on page 2, line 14 with the following rewritten paragraph:

The object of the invention is to eliminate drawbacks of the prior art and to achieve an improved method for mutually separating minerals, in order to control the process from a slurry containing valuable minerals, by adjusting the partial pressure of oxygen of the gas fed in the process, so that the gases fed in the separate steps of the process are recirculated. ~~The essential novel features of the invention are enlisted in the appended claims.~~

Please replace the paragraph beginning on page 3, line 29 with the following rewritten paragraph:

According to the invention, the overoxidation or overreduction of the minerals contained in the slurry can be prevented by a method that is as expedient and cost-effective as possible. Most chemical reactions that take place in the different process steps are practically irreversible. Once the change has taken place, there is no technical method for returning the minerals to the optimal state. In order to avoid overoxidation or overreduction, the feeding of secondary gas according to the invention is divided according to the different process steps, so that to each process step, there is fed either the same secondary gas, or the partial pressure of oxygen in the secondary gas is changed, when necessary, between the gas additions fed in the different process steps. Thus, in case it is necessary on the basis of the performed measurements, recirculation gas can be used in at least one process step, the content of said oxidizing gas being lower than the oxygen content of air. In that case for instance hydro hydrogen sulphide or edulphur sulphur dioxide can be used as the reducing gas. Likewise, when necessary, at least in one process step there can be used recirculation gas, the content of said oxidizing gas being higher than the oxygen content of air.

Please replace the paragraph beginning on page 4, line 15 with the following rewritten paragraph:

The closed gas circulation according to the invention results in that the whole process is made to work in an economically advantageous way with oxidation potentials lower than in the prior art. Thus it is possible to achieve a better selectivity in the separation of minerals, and a completely new level of operation is achieved as regards the mineral recovery-content graph. At the same time, reagent expenses are decreased, and the productivity of the process equipment grows. Moreover, the suction and underpressure naturally created by the rotation of the propellers or other agitation equipment employed in the treatment of valuable minerals can be made use of in the recirculation of gases. Likewise, in order to improve the efficiency of the gas recirculation, in adjusting the contents of the oxidizing gases, there can advantageously be utilized the natural impoverishment of the oxidizing gases taking place in the process.

Please replace the paragraph beginning on page 4, line 29 with the following rewritten paragraph:

Because the whole process of treating the slurry containing valuable metals is carried out in a closed gas circulation, this means for instance that the oxygen content in grinding is on a lower level than in when operating in a normal air atmosphere. As a consequence, the corrosion of the lining materials of the mill used in the grinding process is slowed down, and the consumption of the balls and rods used in the mill is decreased. Advantageous effects of the method can also be observed in the other steps of the process.